

## **Virtual Task-Based Situated Language-Learning with *Second Life*: Developing EFL Pragmatic Writing and Technological Self-Efficacy**

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### **Abstract**

This paper reports on an experimental research study that aimed at investigating the effectiveness of employing a virtual task-based situated language learning (TBSLL) environment mediated by Second Life (SL) in developing EFL student teachers' pragmatic writing skills and their technological self-efficacy. To reach this goal, a control-only experimental research design was employed to compare between participants' performance in two groups: a control group ( $n=10$ ) exposed to a traditional lecture-based writing course; and an experimental (SL) group selected purposively ( $n=10$ ) and exposed to the virtual SL situated language learning environment (online sessions). Procedures were guided by a *five-stage instructional-technological design framework* suggested by the researchers, which involved those stages: (1) analysis, (2) design, (3) production, (4) experimentation, and (5) use & development. Measurement tools included: (a) Pragmatic Writing Skills Post-Test; (b) Academic Self-Efficacy Scale; and (c) E-portfolio for formative assessment. Results indicated the effectiveness of the virtual task-based situated language environment in developing participants' pragmatic writing skills in English, and that SL participants' technological self-efficacy was significantly higher than that of the control group participants. The paper presents recommendations and suggestions for improving English language learning (ELL) – especially writing – through using virtual situated environments in general, and SL in particular.

**Keywords:** Pragmatic writing, second life, situated language learning, task-based learning, technological self-efficacy, virtual language learning

## 1. Introduction

### 1.1 Theoretical Background & Literature Review

#### 1.1.1 Pragmatic writing

In addition to knowledge, language learning encompasses realistic use and contextual-pragmatic practices. Language has its true home in action, the world, and dialogue, not in dictionaries and texts alone (Gee, 2007). Thus, one of the most significant challenges facing learning English as a foreign language (EFL) or English language learning (ELL) in general, is how to enhance students' engagement in the target language for meaningful purposes in and out of the classroom (Toyoda & Harrison, 2002; Yang, 2011). This has made the mastery of English language both in the spoken and written forms 'imperative' (David, 2008: p73)

Therefore, there is a current pressing need to develop *pragmatic competence* in English to connect it with real-life practices. According to Canale (1988: p90), it is concerned with 'the relationships between utterances and the acts of functions that the speakers intend to perform through these utterances...and the characteristics of the context of language use that determine the appropriateness of utterances'. This involves learning functional and direct uses of English to support, extend and complement theoretical knowledge about it (Abdallah, 2014).

Foreign language (FL) learners might show mastery of the vocabulary and grammar of the target language, but without possessing a comparable control over its pragmatic uses (Juan & Campillo, 2002). Hence, the term *Functional Linguistics* emerged to refer to the pragmatic use of English to accomplish a variety of realistic purposes. Thus, it refers to the usage English required to perform a specific function or reach a certain social goal.

Functionally, writing is about 'quality' more than it is about 'quantity', and students have to work on a piece until they feel satisfied with it (The Functional Skills Support Programme, 2007: p92). Therefore, a focus on learners' pragmatic competence through a pragmatic-functional approach to ELL, especially writing, ensures a meaningful communicative use of English to achieve certain purposes (Hartnett, 1997). In this sense, writing is strongly enhanced if teaching is directly tailored to learners' specific needs (Nunan, 1999). Writing pragmatically is meant to accomplish realistic goals like apologising, directing others and giving advice. Thus, *pragmatic writing* in English is perceived as an interactive process that involves accomplishing in writing a particular social function within a specific cultural context (e.g. applying for a job or writing a letter) (Carrasquillo, 1994).

Few studies, especially as far as the Arab Egyptian context is concerned, tackled the pragmatic uses of EFL (e.g. Zhuge & Wu, 2005; Salem, 2013; Abdallah, 2014). A recent relevant study by first author (Abdallah, 2014) mainly sought proposing a working taxonomy and list of those functional writing skills currently needed by Egyptian EFL student teachers to develop their pragmatic competence in English.

#### 1.1.2 Situated task-based language learning

Many educators and researchers in ELL (e.g. Warschauer, et al., 2000; Shih & Yang, 2008; Yang, 2011) strongly believe that successful learning is anchored in collaboration, cognitive apprenticeship, and situated cognition. It is assumed that situated, contextualised practice always leads to deep understanding and meaningful learning (Abdallah, 2011b). *Situated learning* in general approaches learners as 'active constructors of knowledge who bring their own needs, strategies and styles to learning, and skills and knowledge are best acquired within realistic contexts and authentic settings, where students are engaged in experiential learning tasks' (Felix, 2002: p3).

More specifically, *situated language learning* focuses on the role of the context and situation in language learning and knowledge construction. In this sense, our social worlds, not only shape the opportunities we have to develop certain types/forms of knowledge and abilities, but also affect our sense of how to use them to achieve particular ends/goals (Brown, et al., 1989; Warschauer, et al., 2000; Abdallah, 2011a). Knowledge itself takes a situated stance, which Barab & Duffy (2000) describe as neither 'objectively defined' nor 'subjectively created', but rather 'reciprocally constructed' within the individual-environment interaction. Thus, it emphasises and prioritises 'social interactions' as a key practice in language learning (Brown, et al., 1989).

This practice can be extended nowadays by those online interactions enabled by the Web, especially virtual worlds such as Second Life (SL); they facilitate language acquisition by engaging students in authentic learning contexts where a sense of community is developed (Warschauer, et al., 2000; Holley & Oliver, 2010). In this regard, Nelson and Ketelhut (2007: p269) argue that educational multi-user virtual environments (MUVEs) such as SL have recently emerged as a form of socio-constructivist and situated cognition-based educational software.

Task-Based Situated Language Learning (TBSLL) is a way of instructional intervention that should promote an interactive environment where some pragmatic language goals can be accomplished. In this sense, a task is viewed as a piece of meaning-focused, communicative work, which involves learners in comprehending, manipulating, producing and interacting in the target language to connect them to the real-world of language use (Nunan, 1999). In this regard, Brown (1994: p229) argues that 'in task-based instruction, the priority is not the bits and pieces of language, but rather the functional purposes for which the language must be used'. For example, the main focus in the learning situation might be on 'how to write functionally', if pragmatic writing is the main intended outcome.

In this regard, TBLL is viewed as an approach to language learning according to which tasks done by students become central to the learning process. It requires the teacher to organise classroom activities around those practical tasks that language users will engage in, even when they are out (Oura, 2001). Situated learning is consistent with it when tasks are authentic, interactive, situated, and goal oriented.

### 1.1.3 Web 3.0 and virtual language learning

Web 3.0 is sometimes used to mark the convergence of web 2.0 and semantic web (Wahlster, et al., 2006). The *semantic web* in particular marks a significant change or movement from a machine-readable content to a machine-understandable content through meaningful links.

With the advancement of web 2.0 and web 3.0 technologies, 3D MUVEs have been quickly gaining importance as tools of FL instruction that promote collaboration and social presence in a lifelike 3-D environment (Cooke-Plagwitz, 2008). As educational tools, they possess some advantages such as: (1) free access and wide presence; (2) developing creativity; (3) fostering participation and collaboration (Kastoudi, 2012); (4) acting as a shared social space and a graphical user interface; (5) enabling real-time interaction and user-generated content; (6) persistence; (7) active support for in-world social groups (Book, 2004); (8) a place for community development where people come together for a variety of self and group-determined purposes; and (9) an anchor for development of new abilities, identities, and knowledge (Hayes, 2006).

Many recent research studies have dealt with *virtual situated learning environments*, especially within language-learning contexts (e.g. Shih & Yang, 2008; Yang, 2011; Kastoudi, 2012). For example, Shih & Yang (2008) designed a 3D virtually synchronous communication architecture for situated language learning to foster communicative competence among undergraduate students who had studied EFL. In particular, they proposed an immersive and interactive virtual English classroom, entitled VEC3D, that integrated a goal-based instructional design, vivid 3D graphics, and real-time voice communication.

According to Garay & Bernhardt (1998), more than ever before, it has become urgent to prepare English language learners for the new situated and communicative skills and practices connected with new technologies. This involves addressing English as used in the real social context and the new workplace - a process that demands helping language learners to bridge the gap between knowledge about English and the functional-pragmatic use of it. This requires employing interactive online spaces for language learning and practice as a means for enabling interactive communication, and thus promoting authentic and functional language use (Warschauer et al., 2000).

#### 1.1.4 Second Life (SL) and language learning

SL was developed by Linden Lab and launched in June, 2003, and educators, especially FLL researchers (e.g. Kelton, 2007; Cooke-Plagwitz, 2008; Shih & Yang, 2008; Jarmon, et al., 2009; Wang et al., 2009), embraced it with great enthusiasm. They recognised the significant features and possibilities that it holds for language learning, especially because it enables free virtual wandering (e.g. by walking, running, underwater diving, flying, and teleporting) and interacting through representative avatars with others around employing both text-based chat and voice chat.

Recognising its affordances, Joe Miller in 2009 claimed that 'language learning is the most common education-based activity in Second Life' (TeamEngage, 2009). By employing computer-mediated communication (CMC), this virtual learning environment fosters effective language learning and communication for many reasons. First, it helps with reducing learners' affective filter that usually causes anxiety and apprehension, which might negatively influence language learning. Virtual presence can result in reduced apprehension and embarrassment (Schwienhorst, 2002) since SL presents an alternative relaxing environment. In particular, as Sobkowiak (2012) argues, it replicates and simulates real-world places, processes, objects and events. Students thus are able to visit and engage with the environment in ways similar to what could be possible in reality.

Second, this virtual environment acts as a mediator of the sometimes-overwhelming rich linguistic and cultural information found in real-life experiences (Henderson, 2009). This way, the internalisation of such linguistic input and language aspects could be much easier and less stressful.

Third, it allows for many educational affordances throughout objects facilitating authentic language learning. Students can integrate different authentic media (e.g. texts, audios, pictures, and videos) that might support functional-pragmatic language use. This also involves facilitating the simulation of realistic complex relations between different learning objects (Horz, et al., 2009).

Similarly, from an *affordances* perspective that recognises the educational benefits/qualities of an object/environment for foreign language learning (FLL), Sobkowiak (2012) summarises these in building, creating, exploring, chatting, sharing, self-expression, and fun. In this sense, *SL* can afford many language-learning opportunities (e.g. authentic

communication and pragmatic language use). According to Henderson, et al. (2009), SL is particularly well suited for teaching and learning second/foreign languages. Students can immerse themselves in linguistically appropriate environments, adopt roles, and even identify what can provide them with a rich affective-cognitive model for language performance. Moreover, they can interact and collaborate with others to achieve complex goals through pedagogically appropriate media, such as text, voice, and video.

In addition, SL, as Istifci et al. (2011) argues, facilitates communication and meta-communication by creating a platform for students and teachers to interact in a context with no boundaries of time and distance. 'Once student and instructor meet on the common ground of agreeing that they exist, albeit virtually, in an environment in which learning will take place, that agreement is the cement that ties all parties involved to the learning initiatives' (Kelton, 2007: p4).

In this regard, Jarmon, et al. (2009) explored the process of delivering an interdisciplinary cross-cultural communication course in SL using an experiential learning approach. More specifically, their study sought empirically examining the actual instructional effectiveness of SL as an experiential cross-cultural learning environment. In addition, researchers and scholars in the Arab world started recently to employ SL as an interactive learning environment. For example, Al-Malki, et al. (2015) report on employing SL as a medium for professional development in a practicum course delivered to some university students in Saudi Arabia.

Moreover, Peterson (2012) reports on task-based interaction of EFL learners in SL, focusing on an investigation of the SL-based text chat of learners located at a university in Japan. Data analysis reveals that the environment, tasks and collaborative interaction are socio-culturally useful in language development. Collaborative interaction involved peer-scaffolding focusing on lexis, and correction. Participants' feedback was broadly positive, indicating that specific features of SL such as individual avatars, coupled to the computer-based nature of the interaction, appeared to enhance discourse management, engagement, and participation. Findings suggest that SL provides an arena for learner-centred social interaction that offers valuable opportunities for target language practice, and the development of autonomy.

In other words, virtual worlds are persistent; the environment (e.g. a restaurant) and the objects (e.g. menus) do not disappear at the end of the lesson. Users can return to the place of their learning, interact with the objects and, depending on the instructional design, peruse records of the event (Henderson, et al., 2009). Moreover, this immersive social environment provides – in linguistic terms - a range of discourse elements, which are generally not available in less immersive environments. Thus, the value of SL is that it merges the physical co-presence with linguistic co-presence of the interlocutors, both of which are important elements in discourse, as they facilitate learning through meaning negotiation (Schwienhorst, 2002).

From a practical language learning perspective, SL allows students to form groups and collaborate by moving their avatars away from the others to conduct interactive semi-real life conversations. Thus, unlike a discussion forum or a text chat, students can dynamically create and reshape groups according to pedagogical imperatives, or interpersonal/social dynamics (Henderson, 2009).

In this regard, Jauregi et al. (2012) investigated the added value that synchronous collaboration projects through video-communication or SL might have in language learning. Results show that telecollaboration experiences have an added value on cultural, linguistic, interpersonal and motivational issues. In particular, the synchronous learning environments used in conjunction with effective interaction tasks and the opportunities to engage in meaningful

interaction with expert peers (native student teachers) contributed to empower intercultural learning experiences.

Moreover, within another language learning context, Kastoudi (2012) examined the potential of 3D Virtual quest games in *SL* to enhance vocabulary acquisition through interaction, negotiation of meaning and noticing. Qualitative analysis showed that there was a great amount of output and meaningful interaction, as well as negotiation of meaning, and small but substantial quantities of incidental learning of vocabulary occurred. Besides, the negotiation of meaning process itself facilitated the development of communicative competence.

Similarly, a recent study by Lan (2014) aimed to determine the effectiveness of *SL* for improving the oral output of overseas Chinese students learning Mandarin Chinese. Results showed that learning Mandarin in a *SL* environment significantly increased the in-class oral output of those students, who also made significant improvements in oral performance and language learning attitudes.

In the same vein, Wang et al. (2009) employed an evaluation research approach to search for appropriate ways to integrate *SL* into an EFL programme. The focus was on Chinese students' perspectives of an EFL Programme in *SL* and their perceived technology readiness to use *SL* for EFL learning.

For research purposes, tasks need to be used in a situated fashion within a 3D setting that mimics real-life situations. Task-based learning as a situated constructivist-based methodology is compatible with the *SL* environment in which real people (i.e. students) are represented by *avatars* behaving on their behalf. In this sense, situated language learning, with its focus on cognitive engagement with authentic task-based communicative events enabled by this virtual space, should help students to experience EFL in various situations within the context of the target culture.

Many studies have dealt with employing online situated ELL environment (e.g. Shih & Yang, 2008; Yang, 2011; Abdallah, 2013). For example, Yang (2011) attempts to engage college students who were learning EFL in the target language and culture, and subsequently improve their language performance, through an online situated language learning environment that employed both synchronous and asynchronous online communication modes in and after class.

Reviewing literature, very few studies linked *SL* with writing. Munro (2010), for example, report on an evaluation study of two sessions of creative writing workshops offered online using *SL*. Key findings indicate positive gains in participants' creative writing performance, especially from virtual collaborative interactions online using avatars. As a learning environment, *SL* provided adequate and ample creative writing opportunities.

However, no studies so far dealt with (or connected) *SL* with pragmatic writing in English. More specifically, no studies sought to develop pragmatic-functional writing skills through a situated learning intervention based on Second Life.

### 1.1.5 Technological self-efficacy

Many psychological factors might influence student learning. In particular, some affective or emotional components (e.g. self-concept, body image, and confidence) might influence the individual student's comprehension and overall performance. Distinguished from 'self-concept' and 'self-esteem', Self-efficacy has been recently researched as one of those important affective components that influences and directs learning. Self-efficacy is grounded in a larger theoretical framework known as 'social-cognitive' theory, which assumes that human achievement depends

on interactions between one's behaviours or personal factors (e.g. thoughts and beliefs) and external environmental conditions (Bandura, 1997).

In general, 'Self-efficacy' refers to a person's belief in his/her own competence: that s/he is capable of performing in a certain manner to attain a certain set of goals (Ormrod, 2006). One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges (Luszczynska & Schwarzer, 2005). In an ELL context, Zheng, et al. (2009) explored self-efficacy as an affective factor in learning EFL within a virtual world environment (Quest Atlantis). Findings suggest that virtual worlds may provide a space for English language learners (ELLs) to increase confidence and comfort and to overcome cultural barriers for ELL.

Henderson, et al. (2009) conducted one of the few studies that tackled both SL and self-efficacy in a language learning context. The study found that collaborative language activities in an immersive virtual world (SL) improved students' self-efficacy beliefs about their capacity to use Chinese language in a variety of real-life contexts.

As a variation of self-efficacy, technological self-efficacy (TSE) has become a very essential learning component that teachers should consider. Originally, the term emerged to indicate embracing and adopting a new technology. More specifically, it is 'the belief in one's ability to successfully perform a technologically sophisticated new task' (McDonald & Siegall, 1992). Further, based on Bandura's (1997) definition of academic self-efficacy, TSE can also refer to an individual's belief (conviction) that they can successfully achieve at a designated level on a technological task or attain a specific goal while using available technologies. It is about a student's belief that s/he can successfully engage in and complete course-specific technological tasks, such as accomplishing course outcomes within a certain technological environment, and thus demonstrating technological competency skills. So far, no studies have dealt with technological self-efficacy in an *SL* environment within an ELL context, especially as far as pragmatic writing is concerned.

## 1.2 Research Problem & Objectives

Second-year EFL student teachers at Assiut University College of Education (AUCOE) are experiencing difficulties with the pragmatic use of the English language, especially as far as writing composition is concerned. This is critical in their pre-service teacher education programme; they might continue until graduation without developing sufficient pragmatic competence (Abdallah, 2014). In the course of their study and during the teaching practice sessions, they are sometimes required to re-write and adapt some difficult English passages to make them easy to learn. After graduation, their need for developing pragmatic writing skills increases drastically, especially when required to teach some functional aspects of English. This necessitates being competent enough themselves in the pragmatic use of English quite early in their education or training programme.

As far as language-learning environment is concerned, it was evident - through some interviews and observations - that those student teachers were hardly provided with any interactive language-learning environments that effectively foster their pragmatic use, and thus enable them to compose English functionally. Computers and language labs are hardly used for anything more than language modelling and listening practice. Thus, there are few – if any at all – opportunities to communicate and interact via electronic means in the language lab.

A small-scale semi-structured interview revealed that many of those student teachers were unable to functionally use English in writing in simulated real-life interactions. For example, when required to produce some simple short pragmatic documents (e.g. reports &

requests), they were unable to produce a satisfactory product belonging to the target genre, and thus demonstrated inappropriate pragmatic writing skills. In addition, EFL student teachers' discussions on a course Forum revealed inadequate pragmatic competence. Some of them clearly stated many personal needs in writing such as self-expression, guiding and directing others, and planning to do something.

In addition, most of them revealed negative views about themselves and their academic performance within a technological environment, especially as far as their expectations of their ability to fulfil specific tasks were concerned. This indicates a need to improve their technological self-efficacy to become confident producers and users of the English language.

Therefore, EFL student teachers need to be immersed in a natural, input-rich and meaningful learning environment where the target language can be used spontaneously and functionally. It is supposed that a situated language-learning environment based on *SL* might support EFL student teachers' pragmatic language use while writing, and thus develop some of their pragmatic writing skills and enhance their technological self-efficacy. Throughout this interactive, virtual and situated environment, EFL student teachers can be exposed to a realistic input that takes the form of tasks that include some everyday-life functions and situations.

Subsequently, the study aims at: (1) providing a situated, Web-mediated language learning environment as an alternative to the traditional textbook environment to help 2<sup>nd</sup>-year EFL student teachers' with pragmatic language use, and thus develop their pragmatic writing skills; (2) exposing those EFL student teachers to *SL* as a Web-based application and an interactive collaborative learning environment that supports pragmatic language use; (3) designing a situated instructional tasks compatible with *SL*; (4) assessing the effect of using a virtual task-based situated language-learning environment based on *SL* on developing 2<sup>nd</sup>-year EFL student teachers' pragmatic writing skills and enhancing their technological self-efficacy; and (5) assessing the potential difference for the experimental group students' in technological self-efficacy after developing pragmatic writing skills.

In other words, it attempts answering the following questions: (1) 'What is the effect of using a virtual situated task-based language-learning environment enabled by *SL* on developing 2<sup>nd</sup>-year EFL student teachers' pragmatic writing skills (control group vs. experimental group)?'; (2) 'What is the effect of using a virtual situated language-learning environment enabled by *SL* on 2<sup>nd</sup>-year EFL student teachers' technological self-efficacy?'; (3) 'What is the relationship between 2<sup>nd</sup>-year EFL student teachers' (experimental group only) pragmatic writing skills and their technological self-efficacy?'

## 2. Methodology

### 2.1 Main Approach

To accomplish the main research objectives and answer research questions, the researchers employed a *post-test control-group* experimental design as the main methodology, which involves a five-stage design framework. The main reason for employing this design is the researchers' desire to identify how the proposed intervention (*SL* environment) would work in reality with the target learners, by comparing the performance of student teachers in each group (i.e. the *control* group that studied in the normal way, and the *experimental* group that was exposed to *SL*) on the post-test.

### 2.2 Sampling

The target population was 2<sup>nd</sup> year EFL student teachers at AUCOE (n=176). To accomplish research objectives, a probability (purposive) sampling technique (i.e. criterion sampling) was employed for selecting participants in the experimental (SL) group (n=10). This was employed to reach the most convenient and valid participants from among the target population of EFL student teachers. Although it tends to be a qualitative sampling technique, purposive sampling can be sometimes used in quantitative and experimental research designs to fulfil specific needs (Cohen et al. 2007; Moule & Goodman, 2009).

Then, randomised sampling was used to select a matching control group (n=10). The main reason for selecting these small numbers related to difficulties of arranging face-to-face meetings at the university virtual lab, and subsequently, SL group members were required to work from home on their own PC's (for more details on this, please refer to Stage 1 'Analysis' below in the design framework proposed by the study).

### **2.3 Data Collection Methods & Tools**

Methods and tools designed and administered by the researchers fell under two main categories: instructional-interventional tools and measurement tools. The instructional-interventional tools included: (1) a list of pragmatic writing skills (see Table 1); (2) an SL Technical Guide (available at: <http://assiuuttefl.blogspot.com/2015/05/registering-for-and-installing-second.html>); (3) a Pragmatic Writing Instructional Guide (available at: <http://assiuuttefl.blogspot.com/2015/05/pragmatic-writing-instructional-guide.html>); (4) Situated Interventional Tasks (see Figures 2-7 below); and (5) Reports.

Measurement tools included: (1) Pragmatic Writing Skills Post-Test (see Appendix A); (2) Academic Self-Efficacy Scale (see Appendix B); and (3) E-portfolio (Reflective Diaries) for formative assessment (see Appendix C).

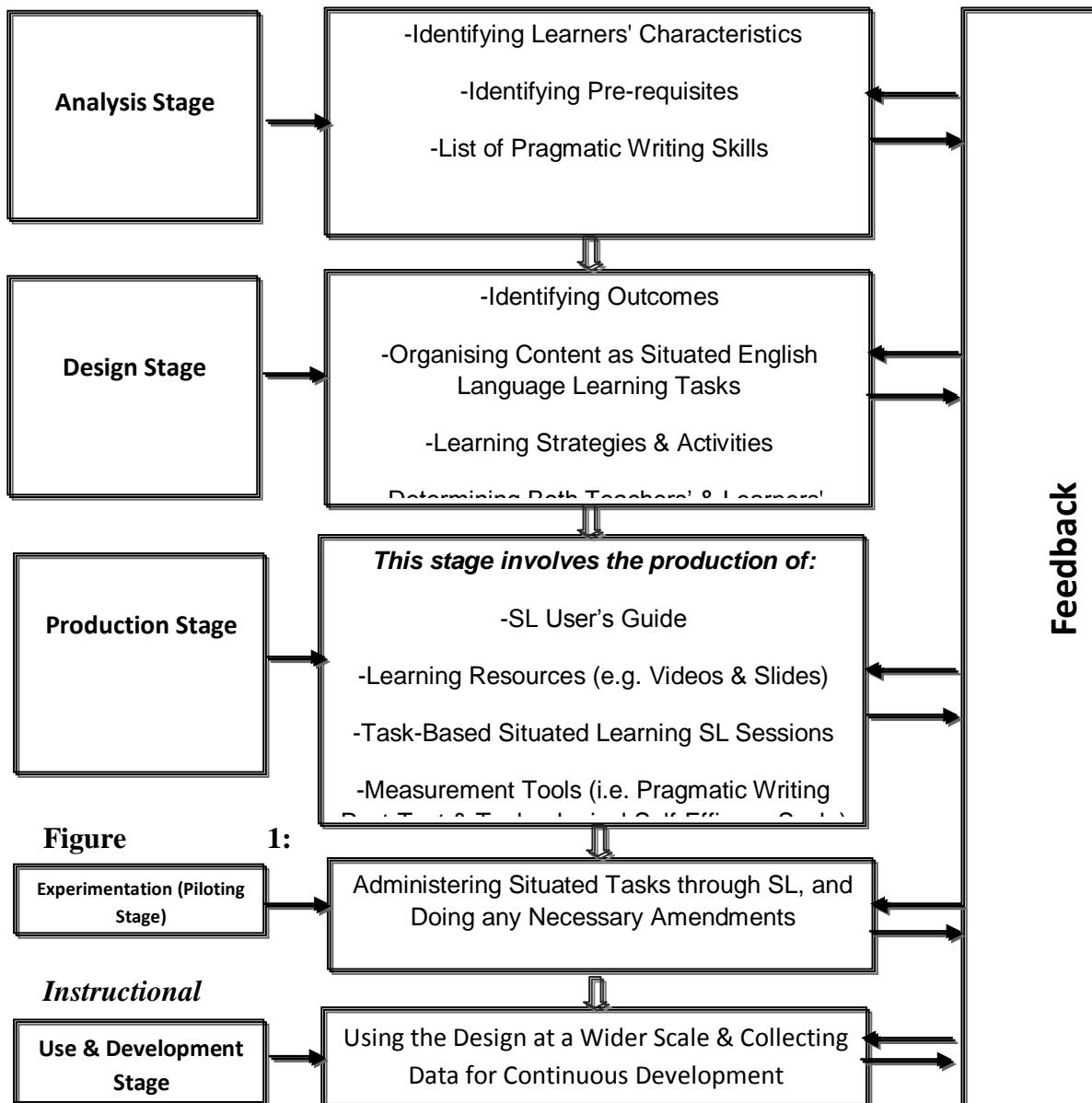
## **3. Procedures**

In line with the main research approach discussed above, procedures followed in the study were based on a five-stage instructional design framework (see Figure 1 below)

### **3.1 Analysis Stage**

#### **A-Identifying Learners' Needs**

As discussed in the sampling section above, some 2<sup>nd</sup> year EFL student teachers at AUCOE were selected due to their poor performance in writing tasks. Many of them were interviewed as a focus group to identify their pragmatic writing problems and needs; also, many of them were asked to record online their specific writing needs on a course Forum.



Thus, SL group ( $n = 10$ ) was assigned for the study based a purposive sampling procedure; the researchers selected only those who met certain conditions. This is a sub-type of purposive sampling, which Moule and Goodman (2009: p274) refer to as *criterion sampling* (i.e. cases where predetermined criteria exist). A control group ( $n=10$ ) was used as a comparative group, where student teachers were randomly selected to learn a lecture-based pragmatic-writing course.

### B-Identifying Pre-requisites

The SL group included student teachers who met some specific criteria that were counted as core requirements for using SL, such as: (1) being interested in SL; (2) being able to work from home; (3) having access to the Internet (moderate to high speed); (4) possessing proper PC's in good condition with the minimum technical requirements for operating SL software; and (5) having Facebook and e-mail accounts. The SL version used was *Second\_Life\_3\_7\_19\_295700\_i686*

Participants were guided into unifying the first five characters in their usernames (ENG14) so that they could be easily identified in the SL environment, especially when strangers appear in the same place or meeting point (see screen shots below).

### C-Pragmatic Writing List

A review and analysis of relevant literature was conducted to reach a list of pragmatic writing skills in English. Then, the preliminary list was submitted to a panel of jury members (some TESOL/TEFL specialists) to state their opinion about it, especially in terms of importance and relevance. Finally, a final list of pragmatic writing skills was composed based on the jury's feedback (see Table 1 below).

**Table 1: Pragmatic Writing Skills**

Items
1. Writing down a short Curriculum Vitae (CV) to submit to whom it might concern (e.g. employers, managers, and academic professors).
2. Taking notes while listening to or watching something (e.g. a lecture or movie).
3. Filling in a job 'application form' for recruitment purposes.
4. Providing written feedback (e.g. using electronic tools or online facilities) when required.
5. Writing (e.g. using e-mail) to accept or refuse an invitation.
6. Making personal requests in writing (e.g. using e-mail and other social networking tools).
7. Writing to thank someone for something.
8. Writing down the main ideas tackled in an oral presentation.
9. Writing to explain something and providing any supporting details.
10. Stating the main highlights (i.e. topics, points and ideas) of a piece of writing.
11. Composing formal letters/e-mails for study and/or recruitment purposes.
12. Writing invitations (e.g. using e-mail) to invite someone for something.
13. Communicating in writing with a course instructor to ask for clarification or advice.
14. Writing down the main headings, sub-headings and topic sentences included in a piece of writing.
15. Writing down an 'official/business letter/e-mail' to request something (e.g. unpaid leave).
16. Writing a synopsis or summary of an article, chapter, and/or a complete book.
17. Writing to apologise for something done wrong.

**Items**

18. Writing a memo to inform someone or a group of people about a specific issue encouraging them to take action.

**3.2 Design Stage**

**A-Identifying Learning Outcomes**

Those outcomes are represented in: (1) Filling-in an application form; (2) writing down a brief CV; (3) writing down the main highlights of an oral presentation; (4) writing down a memo (e.g. using e-mail); (5) interacting with others in a public place (e.g. club); and (6) taking notes of an ongoing presentation.

**A-Organising Content as Situated English Language Learning Tasks**

Content was divided into 7 situated learning tasks (total duration=20 hours); each session took around 2 hours, except for the 1<sup>st</sup> session that needed an extension, as well as some tasks which needed additional sessions (Sessions 5 & 6).

**B-Learning Strategies & Activities**

The instructional design employed in the study was based on a Task-Based Situated Language Learning (TBSLL) strategy that draws on a socio-constructivist situated learning theory (Brown, et al., 1989; Nunan, 1999; Street, 2009). This strategy includes some methods and techniques that were consistent with both the nature of each task as well as the SL environment (e.g. community-based learning CBL & meaning negotiation strategy). For more details, please see info-graphics below (Figures 2-7).

**C-Assigning Both Teachers' and Learners' Roles within SL Environment**

Both researchers determined and divided clearly their roles as instructors within SL before doing the experiment. Thus, the 1<sup>st</sup> researcher (the academic instructor) was to explain and clarify the theoretical component involved in each pragmatic writing task, assign the task, and follow-up with participants while performing the task to ensure their mastery of the target pragmatic skills. On the other hand, the 2<sup>nd</sup> researcher (the technology instructor) was required to identify the appropriate SL places for the task at hand, and then follow-up with students within the SL environment to resolve any technical difficulties that participants could meet. For learners (SL participants), each of them had to immerse himself/herself within the SL environment and interact with other colleagues (mainly through chat) while performing any task; eventually participants had to fill-in a reflective diary template that was used as an e-portfolio (see Appendix C) to upload to the group Facebook page to be assessed by the 1<sup>st</sup> researcher. In addition, they were asked to submit their final reports towards the end of the course to be assessed by both researchers.

**3.3 Production Stage**

**A-SL User's Guide**

The 2<sup>nd</sup> researcher prepared an SL User's Guide (available at: <http://assiuttefl.blogspot.com/2015/05/registering-for-and-installing-second.html>) that explains

and demonstrates many things related to how to use the SL application, starting from how to select an Avatar, and ending with the inventories or lists that could help users to independently explore SL environment and get acquainted with it.

### B-Learning Resources & Activities

Learning resources employed in the SL environment were represented in: (1) some presentations (slides) that were made within the SL environment; (2) some online YouTube videos that were displayed directly to participants in SL; (3) a Facebook group entitled, 'Second Life For English Writing' was launched for the purpose of: uploading some documents (e.g. SL User's Guide), distributing any directions in regard to the situated learning tasks, and uploading and submitting assignments completed by participants; and discussions (see Figures 2-7 below).

### C-Tasks-Based Situated Learning SL Sessions

The following figures, which were designed in the form of *info-graphics*, illustrate briefly each session and the main components (i.e. Tasks, Location & Setting, Learning Methods & Techniques, Linguistic Input & New Items, Virtual Interactions, and Evaluation Techniques).

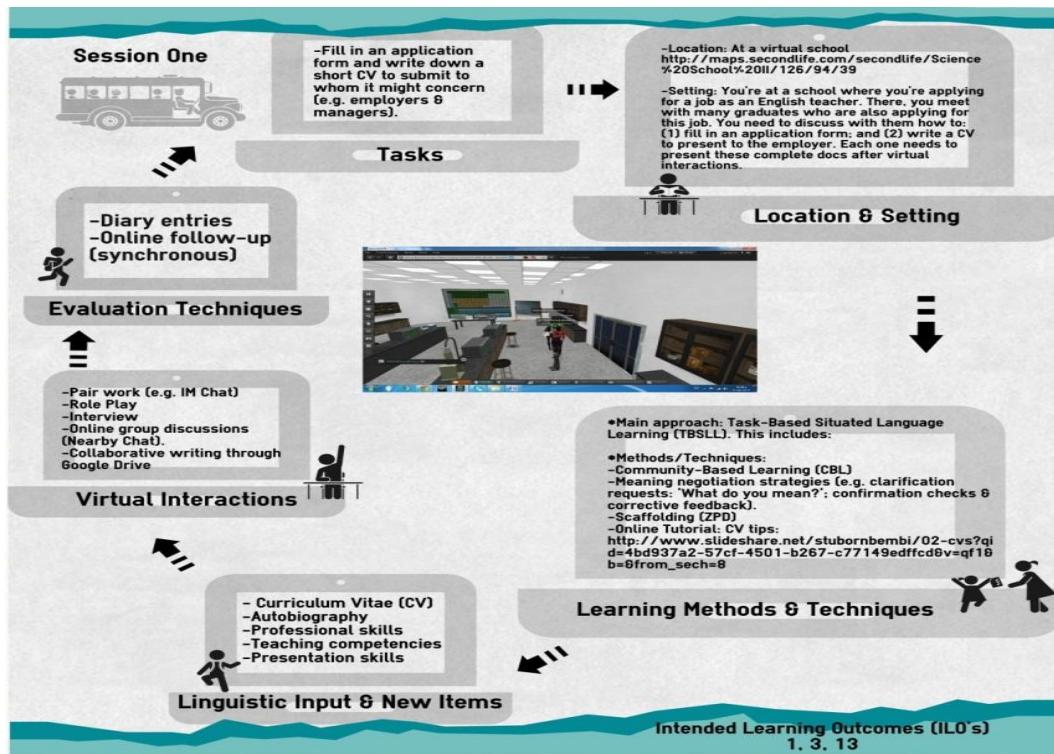


Figure 2: Session One

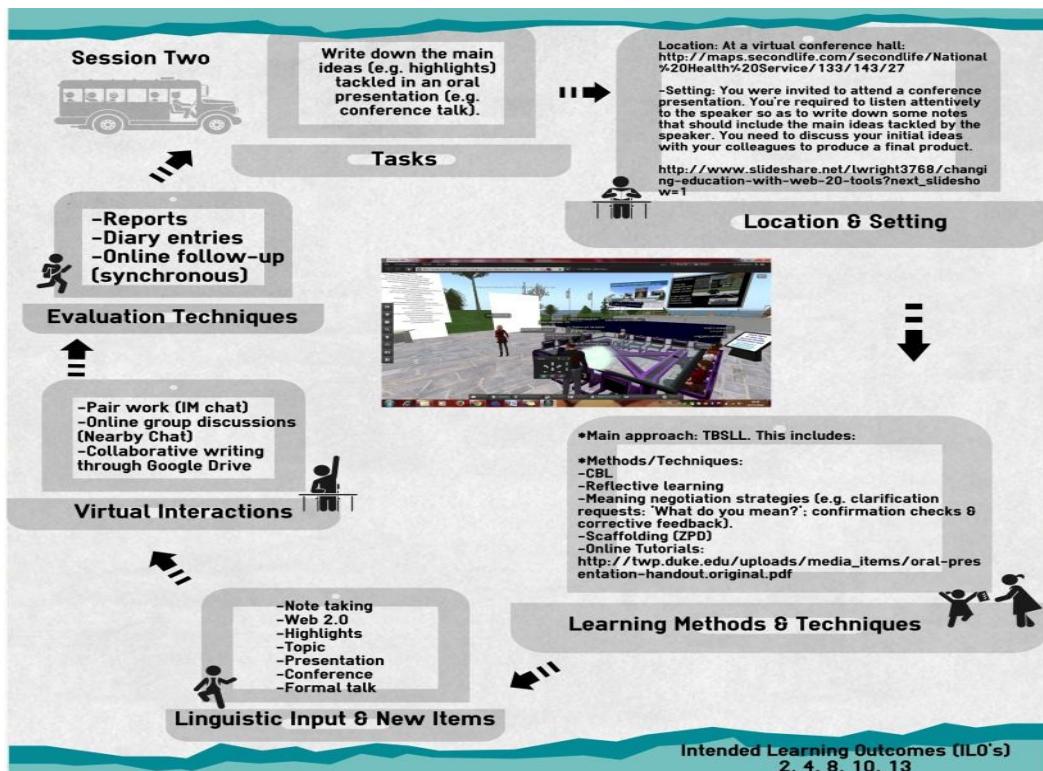


Figure 3: Session Two

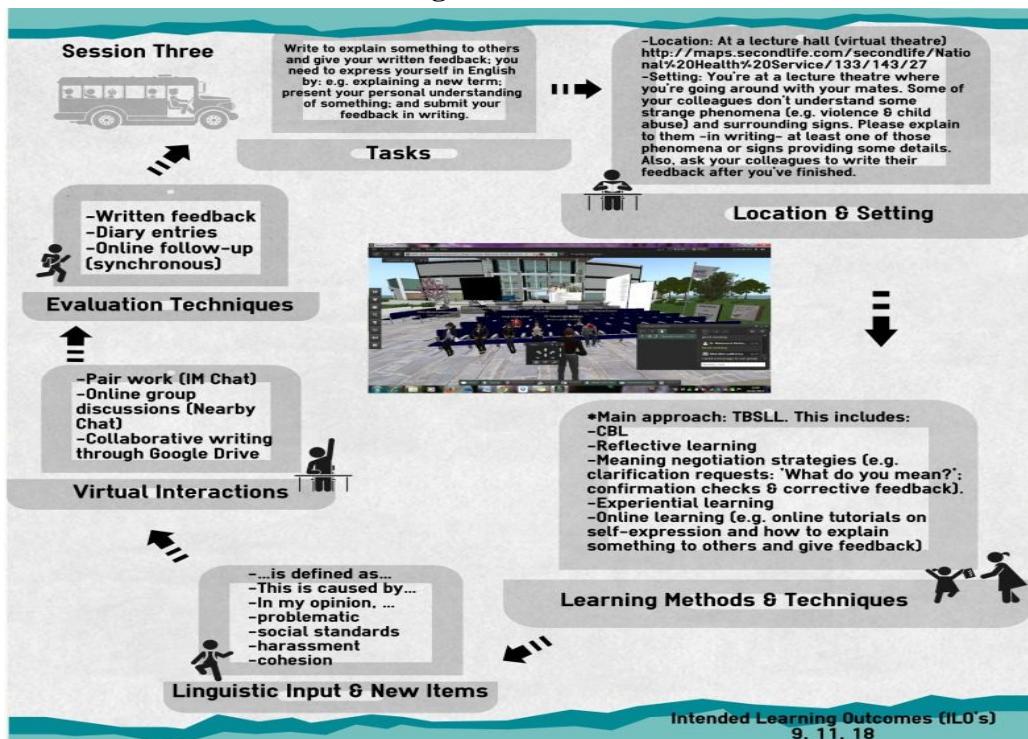


Figure 4: Session Three

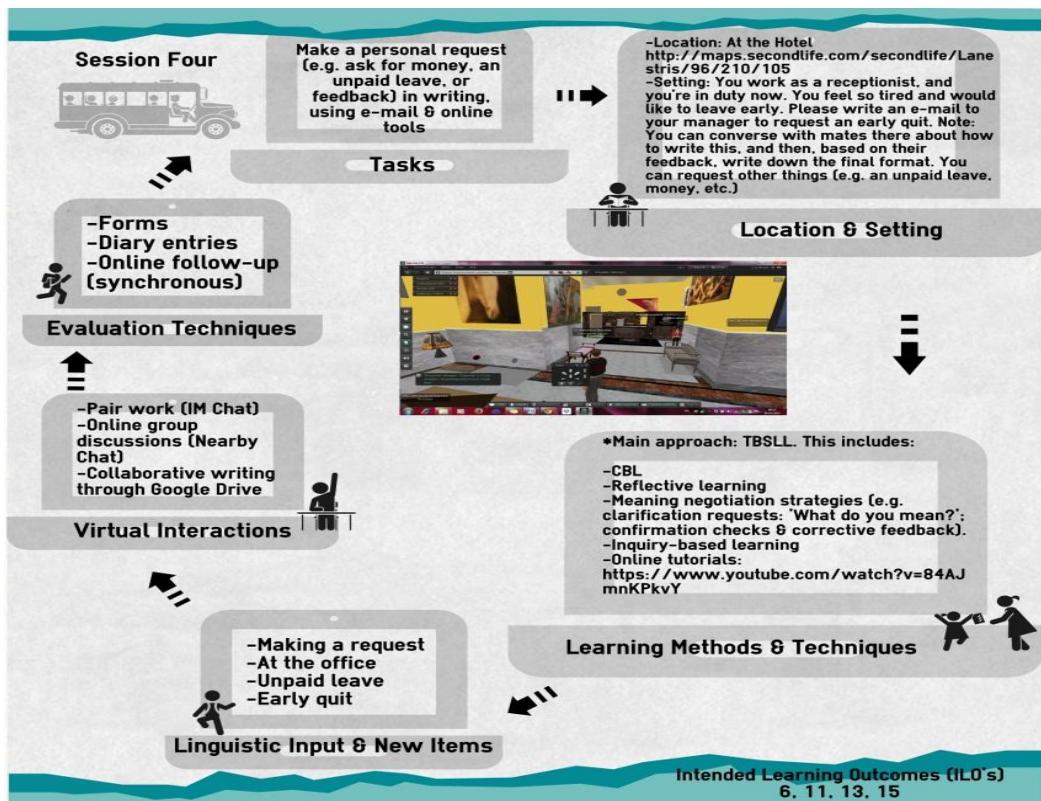


Figure 5: Session Four

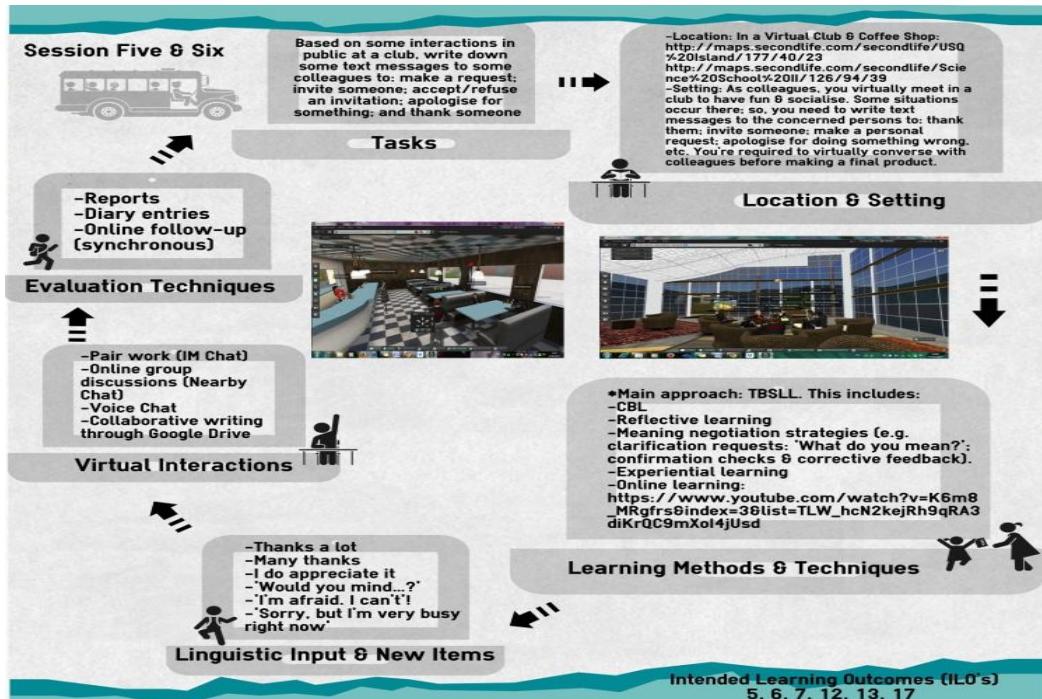


Figure 6: Session Five & Six

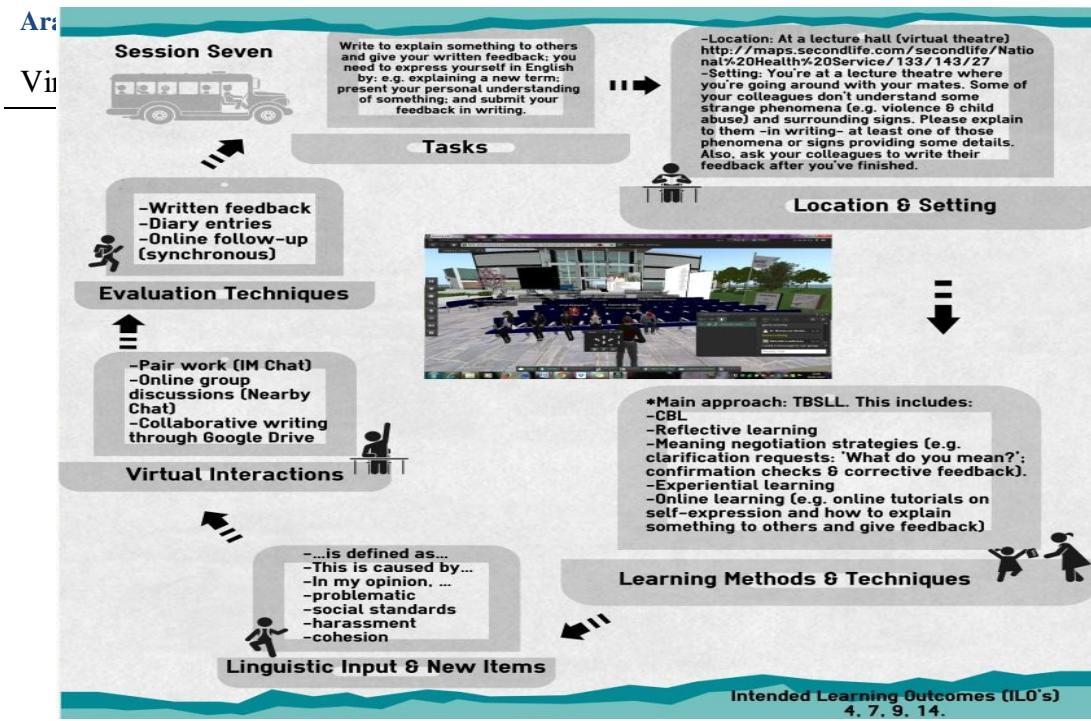


Figure 7: Session 7

### C-Producing Measurement Tools

The 1<sup>st</sup> researcher prepared the Pragmatic Writing Test: Examiner's Guide and Student's Version (see Appendix A). It was constructed in the light of the target writing tasks and outcomes. It included six questions (20 marks for each; total score = 120), all of them were completed without the examiner's guidance, except for the 1<sup>st</sup> question that relied on listening. Questions varied in timing (ranging from 10 to 20 minutes depending on the nature of each task). To check validity of the test, it was displayed to some ELL & writing specialists (n=20), and modified based on their suggestions. Reliability was tested by split-half technique using Cronbach's Alpha, and the resulting value was 0.7.

The 2<sup>nd</sup> researcher constructed the Technological Self-Efficacy Scale guided by a review of literature in the field as well as the nature of the SL learning environment. In its initial form, the scale consisted of 55 items that were displayed to some jury members specialised in Educational Technology and Instructional Psychology. In the light of their remarks, some items were rephrased and removed; others were moved and placed under other dimensions. Thus, the final scale included 50 items distributed under four main dimensions: (1) Virtual Learning Environment (8 items); (2) Technological Persistence (9 items) (those two dimensions represent 'Input'); (3) Technological Responsibility (19 items) (which represents 'Processes'); and (4) Technological Experience (14 items) (which represents 'Output') (see Appendix B). The split-half technique (Cronbach's Alpha) was employed to test reliability resulting in a value of 0.8.

### 3.4 Piloting Stage

At this stage, which preceded the experimentation of the design with the SL group, the design (SL situated tasks) was piloted with 4 EFL student teachers who participated voluntarily. The main goal was to test the SL environment in general and its suitability to the target students by administering some samples of the designed tasks. Two successive sessions were conducted, and accordingly some notes were taken to improve this virtual learning environment.

### **3.5 Use & Development Stage**

Generally speaking, two groups were selected: a control group (n=10) and an experimental (SL) group (n=10). Participants in the experimental (SL) group were identified through some informal interviews and online chats based on the specified criteria mentioned above (see the 'Sampling' section above). Then, as a preliminary procedure, a Facebook group page was created to act as a platform to include those participants so that they could: (1) see all instructions and announcements related to using SL; (2) ask questions and exchange any useful ideas; (3) receive feedback and tutorials; (4) find solutions to any technical problems that they might encounter while using SL; (5) communicate smoothly at any time with instructors (i.e. the researchers), and with each other; and (6) have an online meeting point in cases of emergency (e.g. when the SL application crashes).

Then, the main experiment was conducted within the SL environment, in the form of task-based learning sessions, some of which were prepared in advance, and some required virtual situations and interactions that sometimes included some strangers/SL users who were involved in topics of discussion at hand. The whole intervention (7 sessions) required 16 hours (8 meeting times), some of which were conducted during the 1<sup>st</sup> semester, and most of them during the 2<sup>nd</sup> semester of the academic year 2014/15. Each session lasted for approximately 2 hours, except for the 1<sup>st</sup> session, which took around 4 hours.

Since SL is a demanding application in Egypt, which is too hard to operate successfully in high traffic, participants were asked to work during a specific period of time early in the morning (from 8:00 am to 10:00 am), and sometimes late at night (from 10:00 pm to 12:00 am) when information traffic was low and consequently, Internet speed was quite high.

SL participants were gradually exposed to the TBSLL environment facilitated by SL, while those in the control group were instructed in the traditional way (i.e. normal lecturing and workshops).

Following the experiment, the research measurement tools (i.e. Pragmatic Writing Test and Technological Self-Efficacy Scale) were administered to both groups on an individual basis. Then, results were obtained and processed statistically using SPSS 16, and then interpreted in the light of the main research questions.

More specifically, there are many details within this experimentation stage that need more elaboration. Due to some constraints (e.g. Internet speed problems at university where using online social-networking websites and virtual world applications was officially banned during working hours), only virtual sessions were done from home at both instructors' and participants' convenience.

Pragmatic writing topics were delivered simultaneously face-to-face to participants in the control group (n=10). They studied the course theoretically in lecture halls and workshops (total=3 hours a week), for successive 6 weeks. Those topics were consistently organised with the virtual sessions conducted with the SL group once a week.

At the beginning, SL participants were guided by the 2<sup>nd</sup> researcher – both face-to-face (support and orientation for 2 hours) and online (for 2 hours) into how to use SL and resolve some technical issues; this included ensuring their mastery of the basic skills required for interaction in the SL environment (e.g. editing profile, moving, teleporting, and changing view angle) before starting the scheduled virtual sessions. In addition, an SL User Guide was constructed and uploaded to the SL Facebook page to be available to all group.

Further, more technical problems were identified; and subsequently, the researchers interfered on an ad-hock basis to resolve them. For example, the researchers were obliged to

unify SL version (Second Life Viewer 2.3.7.19) for all users to avoid mismatch between application requirements and participants' computers' specifications. In this regard, private tutorials were conducted when required, and sessions were not launched before all technical issues had been resolved.

The first virtual session started on Saturday, 22 Nov. 2014 where participants were required to fill-in an application form of a teaching job, and write an accompanying CV to present to the employer (see Figure 2 above). Participants met in an open free learning hall in SL, which was chosen and tried out in advance by researchers based on its suitability for the target task (see screen shot below). During this virtual session, many participants needed technical assistance, and therefore, the session required another assistance on Facebook. Further, another supplementary session was arranged at the same place on SL to enable participants to complete all the required tasks, and eventually present their final products (see screen shots below).

There always was a general introductory session in the same virtual auditorium or teaching hall (see screen shots) which was employed as a meeting point where all participants' avatars gathered and met to hear orientation made by instructors. During this, some videos or slides were presented as links within the SL environment. In addition, participants were guided into using other online learning resources outside the SL environment. To make things work properly while interacting in SL, especially as far as communication among all members was concerned, all participants were asked to send and accept friend's requests to and from each other, including course instructors.

The detailed learning/teaching agenda was very flexible to suit the situated-learning pedagogy imposed by SL environment. Thus, plans were sometimes adapted and changed to cater for new situations and events. For example, some foreign strangers in many occasions came along to watch what we were doing. Because they were speaking English, the researchers took this opportunity in their favour by asking the strangers to do some functional tasks with participants. They were so cooperative and interactive, and promised to show up whenever they were requested to help with the learning process (see screen shots below).





Virtual places were sometimes changed or replaced with more appropriate ones once participants experienced any problems or difficulties while exploring them. Seating arrangements and positions were done based on the nature of the task at hand, and the language functions in focus to mimic real-life interactions. Facilities already there in the virtual auditorium (e.g. screens) were purposively employed to serve the learning process (e.g. watching online YouTube videos).

Communication gestures (e.g. 'hey', 'wow', 'laughing', and 'dancing') were functionally used along with speech and text messages to make avatars sound real, and this could reinforce the intended outcomes.

Technical problems were always occurring, such as: avatar freezing, connection breakdown, inability to use certain features, and inability to speak. Technical assistance was always provided by the technology instructor on an ad-hoc basis.

Along with the obligatory existence of the participants in one place for interactive purposes (through pair work and group work), free tours were allowed to allow participants to explore new areas or sites to become familiarised with the SL application and get used to new places (see screen shot below).



Due to the nature of the writing tasks as part of the functional writing course, both 'nearby chat' and 'private IM chat' were employed for different reasons and purposes. Thus, nearby chat was employed for whole-group interactions, while private IM chat was employed for resolving individual technical problems or discussing some private issues (see screen shot below).



Improvisation, as an element that distinguished virtual worlds in general and SL in particular, was effectively employed as an immersive language learning practise. Participants were sometimes required to improvise phrases and sentences while being involved in role-play and other situated activities.

#### 4. Results & Discussion

In this section, the researchers display the results of the study sequentially based on the research questions.

To answer the 1<sup>st</sup> question, '*What is the effect of using a virtual situated task-based language-learning environment enabled by SL on developing 2<sup>nd</sup>-year EFL student teachers' pragmatic writing skills (control group vs. experimental group)?*', the pragmatic writing test for both the control group and the SL group by two scorers, and the mean score for each participant was taken. Then, results were obtained in SPSS through Mann-Whitney for non-parametric data.

To obtain effect size, the following equation was employed:  $r = z / \sqrt{n}$  (<http://yatani.jp/HCIstats/WilcoxonSigned#EffectSize>) (see Table 2).

**Table 2: Mann-Whitney Results for Pragmatic Writing Test**

Group	N	Mean Rank	Sum of Ranks	Z Value	Significance	Effect Size
Student's Score	Control	6.40	64.00	3.103	0.01	0.98
	SL	14.60	146.00			

		Group	N	Mean Rank	Sum of Ranks	Z Value	Significance	Effect Size
Student's Score	Control	10	6.40	64.00	146.00	3.103	0.01	0.98
	SL	10	14.60					
	Total	20						

The table above indicates statistically significant differences at the 0.01 level between participants' means of ranks on the Pragmatic Writing Test in the two groups in favour of the experimental (SL) group. Besides, the effect size value was 0.98, which indicates high gains by participants in the SL group. These positive results can be attributed to the following privileges that the SL group experienced: (1) SL provided innovative and non-traditional learning methods and techniques, such as meaning negotiation strategies, peer correction, Avatars interactions, and oral & written chat; (2) participants employed the rich linguistic input they had acquired and developed via other academic courses, and thus could put this into practice in a joyful, playful, and interactive environment that fostered working creatively while carrying out some tasks within SL; (3) SL immersed participants in a virtual learning environment and made them feel with a strong personal presence. This goes with a study conducted by Jarmon, et al. (2009); (4) SL connected language learning theory with practice, as it added new dimensions for language use and practice, which included identification with avatars and role playing; (5) evaluation in SL was conducted using formative assessment procedures as opposed to traditional lecture-based methods, and this led to the positive gains as reflected by the test results; (6) participants performed many different roles within the SL environment, and this led them to developing their pragmatic writing skills; and (7) participants' reflective diaries led them to understand how they were learning within SL, and how they became aware of their own perspectives as well as those of others.

The above results are consistent with those reached by other studies that employed SL as an effective learning environment for a variety of language learning purposes (e.g. Shih & Yang, 2008; Jauregi et al., 2012; Peterson, 2012; Lan, 2014; Al-Malki, et al., 2015).

To answer the 2nd question, '*What is the effect of using a virtual situated language-learning environment enabled by SL on 2nd-year EFL student teachers' technological self-efficacy?*', the Technological Self-Efficacy Scale for both groups was processed into SPSS; results were reached through using the Mann-Whitney non-parametric test, and then the effect size was obtained using the same equation used above (see Table 3 below).

**Table 3: Mann-Whitney Results for Technological Self-Efficacy Scale**

		Group	N	Mean Rank	Sum of Ranks	Z Value	Significance	Effect Size
Student's Score	Control	10	7.15	71.50	138.50	2.536	0.01	0.80
	SL	10	13.85					
	Total	20						

The table above indicates a statistically significant difference at the 0.01 level between participants' means ranks of scores on the scale for the two groups in favour of the experimental (SL) group; the value of significance level was less than 0.05, and this denotes an increased

technological self-efficacy for those who were exposed to the virtual SL environment compared with their counterparts in the control group. This is consistent with Henderson, et al.'s (2009) study.

This can be attributed to: (1) the free, positive, interactive and enjoyable atmosphere experienced by SL group within this virtual learning environment, and which helped them to form positive attitudes towards the writing skills; this was evident by the Technological Self-Efficacy Scale results as well as the fact that participants continued working in SL voluntarily; (2) the virtual stimulation of language use and practice provided by the SL environment as participants were – as indicated by their reports that were used for formative assessment purposes - capable of applying, testing and adapting some interactive strategies, both orally and in writing beyond the classroom boundaries. Participants reported enjoying this type of interaction within this virtual environment; (3) feeling identified with their avatars to the extent that one would apologise after hitting another avatar by mistake; (4) feeling actively indulged in an innovative collaborative project that influenced real life; (5) the great utility of SL as a supportive learning environment – as reported by most participants - despite any experienced technical and technological difficulties (e.g. freezes, crashes, updates and electricity problems).

To answer the 3<sup>rd</sup> and last question, *'What is the relationship between 2<sup>nd</sup>-year EFL student teachers' (experimental group only) pragmatic writing skills and their technological self-efficacy?'*, the correlation coefficient was obtained by Spearman equation in SPSS (see Table 4 below).

**Table 4: Results of Spearman's Correlation between Pragmatic Writing Test & Technological Self-Efficacy Scale for SL group**

Group	N	Spearman's Coefficient	Significance
SL	10	0.50	0.05

Results displayed in the above table indicates that the correlation coefficient value is 0.5 which is high and significant at the 0.05 level, indicating the existence of correlation between development of pragmatic writing skills through SL environment and technological self-efficacy for the SL participants. This can be attributed to – as indicated by participants' reports - some factors most of which related to the fact that SL used in the writing course facilitated and improved participants' learning thanks to some specific features of SL along with the employed situated learning tasks. These features include: (1) the affordance of hosting social interactions; (2) allowing participants to actively test their ideas and plans, and put them into practice; (3) grounding SL on real world, as the researchers had already known participants through academic courses and face-to-face interactions; (4) providing participants with multiple opportunities for employing, exploiting and developing a variety of skills (e.g. social, technological, interactive, cross-cultural learning, reflective, and time-management skills); (5) mimicking reality - and even going beyond it – through: flying, diving, penetrating, roaming, and high jumping.

## 5. Conclusion

Results of the study indicate effectiveness of the TBSLL design within the SL environment in developing participants' pragmatic writing and technological self-efficacy. Further, a strong

connection was found between pragmatic writing test and technological self-efficacy. While interpreting the results, the researchers drew heavily on the new learning environment design and interactive features that made the difference.

Thus, based on the obtained results, some conclusion can be made, especially as far as SL environment is concerned: (1) The SL environment is a strong extension of traditional instruction, especially as far as the practical component is concerned; (2) it is considered as an improvement of the learning method through connecting the theoretical aspect with the practical one; (3) it is an outlet for developing imagination and turning it into a creative reality within ELL context; (4) it has a strong contribution in the dissemination of other cultures, such as health awareness and conducting experiments; (5) the experiment is worth implementation with other academic courses and to improve other language skills..

It has become evident that SL is uniquely suited media for developing role playing scenarios to engage learning, if we provide the right mix of opportunity and structure. Indeed, role playing in SL, as Jarmon, et al. (2009) note, may represent perhaps one of the single most compelling educational opportunities for adults in the 21st Century. Moreover, SL can be employed to develop a wide range of language skills, communication skills, and research skills. In addition, the idea of employing SL environment might be taken further into authentic language learning contexts. As far as communicative language teaching and community-based learning approaches are used, SL can create and foster many ELL opportunities. Further, SL might be used as means of teaching practice and continuous professional development, especially when networking skills on wide cross-cultural scales are in focus.

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#### Appendix A Pragmatic Writing Test

*(Examiner's Manual)*

##### ***\*Introduction***

This is a pragmatic-functional writing test that aims at assessing 2nd-year EFL student teachers' pragmatic-functional writing skills. For our research purposes, pragmatic-functional writing, as opposed

to academic and creative writing, is defined as *that kind of writing that involves employing the English language for functional and pragmatic purposes associated with direct real-life use. It aims at conveying a specific, direct and clear message to a specific audience, and thus includes several areas such as writing instructions, memos, formal letters, notes, invitations, advertisements, and reports.*

**\*General Instructions to Examiner**

1. Under your guidance, learners need to deal with each question/section separately and in order;
2. A short general oral introduction (for about 5 minutes) might be used. If used, it will not be counted from the total test time.
3. For the listening-based section/question, please read the short lecture (TWICE at maximum) at normal speed; encourage learners to take notes while listening;
4. Final answers should be provided in the allocated spaces in the same testing sheet;
5. Along with the main testing sheet, learners/examinees must be provided with draft sheets of paper to use for drafting their preliminary answers and initial attempts;
6. All answers MUST BE provided ***in writing***;
7. Learners must abide by time allocated for each section/question in the test; they MUST move quickly to the next section when the allocated time is over.
8. All testing sheets must be collected roughly at the end of the test time.

**\*Listening Script for Question One** (a short lecture to be read by the examiner TWICE at maximum)

*As far as the reading types are concerned, there are two main types: **intensive reading** and **extensive reading**. **Intensive reading** is that type which is commonly used **inside** the classroom to train learners on using reading for specific goals and purposes. In this case, there are tangible tasks to be performed and which should never exceed the time limitations imposed by the school timetable. In these situations, students are normally required to read a short text. A focus is placed on some language issues that the text involves, and therefore, an explanation of the new language items by the teacher is a main practice.*

***Extensive reading**, on the other hand, is this free type which is done independently by students at home. It is usually advised as an extra or **optional** activity that students might do to develop a deeper understanding of the target language as well as some general language skills. Sometimes, students are referred to the library by their teacher to read a story or a book that supports certain topics or learning aspects. This is a common demonstration of an extensive reading activity. In extensive reading situations, students read long pieces of texts such as stories; they sometimes read some parts for **details**, and at other times, they **skim** other parts in order to get the general idea or identify other parts of interest to read in detail. There is no standard way or method for carrying out this type since students are free to do it in the way they like and at the times that suit them. Thus, it is a stress-free type that is carried out in leisure and for pleasure with no obligation. Eventually, it might influence, in a way or another, students' language learning and academic achievement.*

**\*Scoring Criteria**

Scorers need to use the following criteria to assess each learner's written performance for each question. Each criterion composes 5 marks of the whole score of each question (20 marks):

1. **Organisation** (i.e. the extent to which the content is organised).
2. **Communication** (i.e. how effectively the main message has been functionally communicated to the reader).
3. **Style** (i.e. the extent to which the language usage is appropriate and comprehensible; the exactness or vagueness of the choice of words is also considered).
4. **Content** (i.e. rating the quality of the content in general; its relevance).

Each learner/examinee is assessed on a **5-point competence continuum** based on the final written product as follows:

- 1 = INADEQUATE
- 2 = FAIR
- 3 = ADEQUATE
- 4 = GOOD
- 5 = EXCELLENT

***Note: All the 6 questions are stated in the student's version below.***

**Pragmatic Writing Test**  
**(Students' Version)**

Dear student,

Please read very well each of the 6 questions below, and feel free to answer it in the allocated space as required. Of course, you're free to answer it in the way you like. Allocated time might vary for each question; therefore, you MUST move to the next question as soon as the time is over. Please listen carefully for 5 minutes (not part of test time) to the examiner's introductory notes, and try your best to follow them during the test.

***Please treat the following as required providing all your answers in writing just below each question:***  
***(Total score = 6 X 20 = 120 marks)***

*1. Listen to a short lecture, then write down, based on your understanding, the main points or highlights in the lecture. Note: It is very important to take notes in the provided sheet while listening (Allocated time: 20 minutes)*

<b>Total score = 20 (..../20)</b>			
<b>Organisation</b>	<b>Communication</b>	<b>Style</b>	<b>Content</b>
..../5	..../5	..../5	..../5

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*2. Write down a short CV of yourself to a school headmaster. You are required to state your qualifications and convince your employer of your teaching competency and suitability for the job. (Allocated time: 20 minutes)*

<b>Total score = 20</b>			
<b>Organisation</b>	<b>Communication</b>	<b>Style</b>	<b>Content</b>
..../5	..../5	..../5	..../5

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-----  
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*3. Write down a memo to inform someone or a group of people (your colleagues/mates) about a specific issue (e.g. a negative phenomenon, a risk, bad way of conduct, a good practice that can be followed, etc.) encouraging them to take action. (Allocated time: 20 minutes)*

<b>Total score = 20</b>			
<b>Organisation</b>	<b>Communication</b>	<b>Style</b>	<b>Content</b>
..../5	..../5	..../5	..../5

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4. Make a personal request (e.g. ask for money or help; or ask for your boss' permission to leave early). (Allocated time: 10 minutes)

Total score = 20			
Organisation	Communication	Style	Content
..../5	..../5	..../5	..../5

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5. Write a text message of no more than 50 words to a friend of yours to: thank him/her for doing something; ask him/her for money; apologize to him/her about something; or invite him/her to attend your birthday party...Just choose to do **ONE** thing only (Allocated time: 10 minutes)

Total score = 20			
Organisation	Communication	Style	Content
..../5	..../5	..../5	..../5

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6. Write a paragraph of about 10 sentences to **explain** something to others; please express yourself as much as you can (and in the way you like) to convey your personal understanding. Please note that you can make use of an external sheet of paper to plan or outline your paragraph before writing it down. (Allocated time: 20 minutes)

Total score = 20			
Organisation	Communication	Style	Content
..../5	..../5	..../5	..../5

College  of Education  
Curriculum & Instruction Dept.

### Appendix B Technological Self-Efficacy Scale

Dear student,

This questionnaire aims at identifying your technological self-efficacy. Your viewpoint is extremely important for accomplishing our research objectives. Any information you provide is very confidential and won't be used for any purposes other than research.

**Please note that**

1. This scale is not intended to be a test or an exam;
2. There is no right or wrong answer;
3. You should tick ONE response only for each statement without skipping any;
4. Allocated time ranges between 10-20 minutes;
5. You have to answer each item by ticking one of 5 available response options (graded from: 1=Strongly Disagree to 5=Strongly Agree), which applies most to you, as shown below:

No	Statement	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
1			✓			

**Name (Optional):** -----

**ID:** -----

No	Statement		Response			
			Strongly Agree 5	Agree 4	Undecided 3	Disagree 2
<b>1-Virtual Learning Environment</b>						
1.1	I feel that my academic potentials are not realized through the virtual learning environment.	-				
1.2	I'm able to achieve academic progress within the virtual learning environment.	+				
1.3	The virtual learning environment provides me with facilities that support self-learning.	+				
1.4	I feel dissatisfied with the climate of the virtual learning environment in which I learned.	-				
1.5	The virtual learning environment fosters my lifelong learning.	+				
1.6	The pressures and challenges I encounter within the virtual learning environment weaken my academic energy.	-				
1.7	I feel satisfied with learning through the virtual environment.	+				
1.8	The virtual learning environment encourages me to realize my academic potentials.	+				
<b>2-Technological Persistence</b>						
2.1	I continue carrying out technological tasks actively and enthusiastically till they are complete.	+				
2.2	I like learning those courses and topics that challenge my technological capacities.	+				
2.3	I feel annoyed when faced with difficult technological tasks.	-				
2.4	I resume my technological attempts no matter how difficult the beginning is.	+				

No	Statement		Response			Strongly Agree 5
			Disagree 2	Undecided 3	Agree 4	
2.5	I feel determined and persistent while performing technological tasks.	+				
2.6	I feel bored while studying through technology for long periods of time.	-				
2.7	I stay active despite any technological difficulties I might face.					
2.8	I possess the will and ambition necessary for continuous learning through technology.	+				
2.9	It is hard to distract me away from achieving the required technological tasks.	+				
<b>3-Technological Responsibility</b>						
3.1	I'm able to develop and advance my technological skills.	+				
3.2	I fully bear responsibility for accomplishing technological tasks.	+				
3.3	I feel uncomfortable when indulged in technological activities.	-				
3.4	I manage my time efficiently while using technology.	+				
3.5	I strictly follow a specific schedule or timetable while practicing technological activities.	+				
3.6	I always accomplish the technological tasks that I assign to myself.	+				
3.7	I experience difficulties with performing my roles while using technology.	-				
3.8	The methods I employ in studying and organizing instructional materials make me feel technologically competent.	+				
3.9	I'm able to resolve any problems that I might experience while using technology.	+				
3.10	I'm able to manage any required technological tasks in a way that makes me feel confident.	+				
3.11	I always succeed in accomplishing the technological activities I plan.	+				
3.12	My way of studying doesn't help me with accomplishing technological tasks.	-				
3.13	My goals are clear enough to directly lead to accomplishing the technological tasks required from me.	+				
3.14	I achieve the required technological tasks throughout positive real efforts.	+				
3.15	I possess the ability to accomplish the required technological instructional tasks.	+				

No	Statement		Response			Strongly Agree 5
			Disagree 2	Undecided 3	Agree 4	
3.16	I feel unable to satisfactorily accomplish the required technological learning tasks.	-				
3.17	While using technology, I'm able to organize my ideas clearly and accurately.	+				
3.18	I trust my proficiency whenever I learn a new academic topic using technology.	+				
3.19	I feel confident in my technological ability in performing any required assignment.	+				
<b>4-Technological Experience</b>						
4.1	My technological performance is not at the expected level.	-				
4.2	I derive confidence in my academic abilities from my technological expertise.	+				
4.3	My technological experience provides me with confidence while facing academic difficulties.	+				
4.4	I feel that I've gained satisfactory technological experience.	+				
4.5	I feel proud of possessing adequate technological experience.	+				
4.6	Learning through technology provided me with distinguished academic experience.	+				
4.7	I enjoy a good technological status among my classmates.	+				
4.8	The technological experience I've achieved doesn't reinforce my self-confidence.	-				
4.9	My technological experience makes me feel proud among my colleagues.	+				
4.10	I feel happy with the technological experience that helps with accomplishing my goals.	+				
4.11	My current technological experience doesn't exploit my actual potentials.	-				
4.12	My technological experience provides me with potentials for success in public life.	+				
4.13	I feel frustrated because my technological experience doesn't achieve my goals.	-				
4.14	My technological experience enables me to achieve academic competence.	+				

**Appendix C**  
**E-Portfolio: A Reflective Diary Template**

Dear student,

**Please keep a copy of this empty model** in a safe place on your Pc as you'll need to fill it out after each virtual meeting on Second Life (SL). This is **a reflective diary** in which you need to **reflect on** what you have done and learned after each virtual session on SL. This way, we become able to monitor your progress, understand the problems/difficulties you might have encountered, intervene to resolve any technical or personal issues as early as possible, and finally improve the forthcoming sessions. You need to finish this by the next session. Here you're going to provide your **personal reflections and feedback** on the virtual English language learning community employed by SL. To make things easier to you, we've created this model with some **main headings**. We'd like you to kindly write down your personal reflections/viewpoints under each corresponding heading, and finally send your filled-in model as an e-mail attachment or a Facebook message file for both of us:

**A-There are things I liked about this virtual community on SL in this session, such as:**

- 1-
- 2-
- 3-
- 4-

**B-There are things I disliked about this virtual community during the session, such as:**

- 1-
- 2-
- 3-
- 4-

**C-I've learned many new things out of this virtual session, such as:**

- 1-
- 2-
- 3-
- 4

**D-The virtual interactions and online activities I went through in the SL environment were useful/useless because...**

- 1-
- 2-
- 3-
- 4-

**E-I'd like to continue/stop being a member in this virtual learning community because....**

- 1-
- 2-
- 3-
- 4-

**F-I suggest the following tips/points for improving this virtual learning session on SL:**

- 1-
- 2-
- 3-
- 4-

**G-I experienced the following problems or difficulties while using SL as a virtual environment:**

- 1-
- 2-
- 3-
- 4-

***You can add any extra necessary details as appropriate!***

Best regards

Dr Mahmoud M. S. Abdallah

Dr Marian M. Mansour